## THE QUARTERLY REVIEW OF BIOLOGY

FOUNDED IN 1926 BY RAYMOND PEARL

GEORGE C WILLIAMS Editor Emeritus

FRANK C ERK Editor Emeritus

ALBERT D CARLSON Editor

Editor

JAMES D THOMSON DANIEL E DYKHUIZEN Editor

Massimo Pigliucci Editor

GREGORY A WRAY Associate Editor

JO ANN H FITZGERALD DIANA L MANCINI Managing Editor

Manuscript Editor

JULIE DIGIANANTONIO Editorial Assistant

# VOLUME 80 2005

Published by The University of Chicago Press for Stony Brook University

Copyright © 2005 by The University of Chicago. All rights reserved.

#### Advisory Board

2 844 4 854	ny bourd
LARS CHITTKA	University of London
ANNE B CLARK	State University of New York at Binghamton
TOM FENCHEL	University of Copenhagen
JOHN G HILDEBRAND	University of Arizona
Mahendra Kumar Jain	University of Delaware
ALLEN KEAST	Queen's University, Ontario
DAVID LOVEJOY	University of Toronto
JOHN MARCHALONIS	University of Arizona
JOSEPH D McInerney National Coality	on for Health Professional Education in Genetics
EDMUND D PELLEGRINO	Georgetown University
STEPHEN ROTH	University of Pennsylvania
	Florida State University
DANIEL J SCHOEN	McGill University
J WILLIAM SCHOPF	University of California at Los Angeles
STEPHEN C STEARNS	

#### **Book Review Consultants**

Місн	AEI	.A	BELL
OHN	GI	FLE	AGLE
GEET	A		

LEV R GINZBURG MANUEL LERDAU JEFFREY LEVINTON

SIDONIE A MORRISON NICOLE S SAMPSON JOHN R TRUE

#### **Editorial Office**

C-2615 Frank Melville, Jr. Memorial Library, State University of New York, Stony Brook, NY 11794-3349 USA Phone: (631) 632–6977 Fax: (631) 632–9282 E-MAIL address: QRE@LIFE.BIO.SUNYSB.EDU Visit our website: www.journals.uchicago.edu/QRB

The Quarterly Review of Biology (ISSN 0033–5770) is published in March, June, September, and December by The University of Chicago Press, 1427 East 60th Street, Chicago, IL 60637–2954 USA; Phone: (773) 753–3347, Fax: (773) 753–0811 (USA and Canada); Call Toll Free-Phone: (877) 705–1878, Fax: (877) 705–1879 (USA and Canada); Outside USA and Canada, please dial the toll numbers. The following subscription rates include print and online editions; Canadian subscribers, please add \$5 postage per year and 7% GST; Outside the USA and Canada, please add \$8 per year for air delivery; Indiana residents, please add 6% sales tax. Subscriptions are: 1 year = \$268.00 (institutions), \$241.00 (institutions), \$270.00 (institutions), \$280.00 (institutions),

### No 1, March 2005

A Symposium in Honor of George C Williams	1
George Williams Fund for Student Research	2
Introduction	3
List of Contributors for This Symposium Issue	4
George C Williams: Personal Reminiscences Frank C Erk	7-11
Red-Letter Days	13-17
Adaptation: "A Critique of Some Current Evolutionary Thought"	
Helena Cronin	19-26
How Do We Decide that a Species Is Sex-Role Reversed? George W Barlow	28-35
The Evolution of Parental Care	37-45
The Maintenance of Sex as a Developmental Trap Due To Sexual Selection	
	47-53
Carpe Diem: Adaptation and Devaluing the Future	
Martin Daly and Margo Wilson	55-60
Maladaptation and Natural Selection	62-70
George Williams, Theoretician and Guerilla Environmentalist Bobbi S Low	72-83
New Biological Books	
Wolves Are Consummate Predators	87-92
Reviews and Brief Notices	93-150
Directory of Publishers	150-151
Index to Titles and Authors/Editors of Books Reviewed	153-157
Index to Reviewers of Books	158-159
No 2, June 2005	
A Dedication to Dr Bentley Glass	161
Remembering Bentley Glass (1906-2005) Frank C Erk	165-173
Foreword The Editors	174
Reprint of the Commentary: The Critical State of the Critical Review Article	
	175-178
Reprint of the Commentary: Biological Aspects of Technology Assessment	
	179-183
List of Articles, Commentaries, and Lead Reviews in the QRB by Bentley Glass,	
1947-1994	184-185
List of Contributors to The Bentley Glass Memorial Endowment Fund	186
A Hierarchical Perspective of Plant Diversity Daniel A Sarr, David E Hibbs,	
and Michael A Huston	187-212
New Biological Books	
The New World Venomous Reptiles Get the Treatment They Deserve	
Larry David Wilson	213-218
Why Rainbows Are Laura Betzig	219-223
Reviews and Brief Notices	224-273
Directory of Publishers	274-275

Indian to Tislay and Authors /Editors of Books Perioused	277-281	
Index to Titles and Authors/Editors of Books Reviewed		
Index to Reviewers of Books	282–283	
No 3, September 2005		
The Bentley Glass Memorial Endowment Fund	285	
Announcement of Electronic Sample Issue	286	
The Evolutionary Genetics of Canalization	287-316	
The Evolutionary Origin and Elaboration of Sociality in the Aculeate		
Hymenoptera: Maternal Effects, Sib-Social Effects, and Heterochrony		
	317-336	
New Biological Books		
Life and Death Experiences of the Plant Hunters Nancy G Slack	337-340	
Reviews and Brief Notices	341-384	
Directory of Publishers	384-385	
Index to Titles and Authors/Editors of Books Reviewed	386-390	
Index to Reviewers of Books	391-392	
No 4, December 2005		
The Bentley Glass Memorial Endowment Fund	393	
Announcement of Electronic Sample Issue	394	
The Evolution and Functions of Laughter and Humor: A Synthetic Approach		
	395-430	
Germ Banking: Bet-Hedging and Variable Release from Egg and Seed		
Dormancy Margaret E K Evans and John J Dennehy	431-452	
New Biological Books		
Social Preferences in Small-Scale Societies	453-459	
Do Not Self-Indulge	460-464	
Reviews and Brief Notices	465-512	
Erratum	501	
Directory of Publishers	512-514	
Indexes to Volume 80 (2005)		
Titles and Authors of Articles	515-516	
Titles and Authors/Editors of Books Reviewed	517-534	
Reviewers of Books	535-538	

